Was Darwin Right?

—BY—
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A reply to Sir Arthur Keith's
Leeds, Eng., Address
on "DARWIN"

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DARWIN AND SIR ARTHUR KEITH

Judging by the amount of newspaper and magazine space devoted to it, quite a sensation has been caused by the recent presidential address of Sir Arthur Keith before the British Association for the Advancement of Science in August 1927 at Leeds, England. The subject of his speech was the present status of Darwin.

It had been commonly accepted even by the majority of evolutionary advocates that Darwin's sun was on the verge of eclipse. So many and so emphatic have been the declarations concerning the gross fallacies of Darwin's concept—declarations made by the most eminent scientists of the world—and so damaging and disheartening have been these adverse criticisms, that apparently Sir Arthur Keith considered the doctrine of transformism was in sore need of rehabilitation. What better means of rejuvenation could be imagined than to reinstate on his former pedestal of scientific eminence, Charles Darwin, the greatest proponent of a bestial ancestry for mankind?

Keith well knows that evolution stands or falls with what is called "Darwinism." Geo. Barry O'Toole gives this clear explanation of Darwinism as outlined by Darwin in 1859, in his book, "The Origin of Species:"

> "The naturalist bases the evolution of organic species upon the assumed spontaneous tendency of organisms to vary from their normal type in every possible direction. This spontaneous variability gives rise to slight variations, some of which are advantageous, others disadvantageous to the organism. The enormous fecundity of organisms multiplies them in excess of the available food supply, and more, accordingly,

are born than can possibly survive. In the ensuing competition or struggle for existence, individuals favorably modified survive and propagate their kind, those unfavorably modified perish without progeny. This process of elimination Darwin termed natural selection. Only individuals favored by it were privileged to propagate their kind, and thus it happened that these minute variations of a useful character were seized upon and perpetuated by the strong principle of inheritance. In this way these slight but useful modifications would tend gradually to accumulate from generation to generation in the direction favored by natural selection until, by the ensuing transmission of innumerable minor differences, verging in the same direction, a major difference would be produced. The end result would be a progressive divergence of posterity from the common ancestral type, whence they originally sprang, ending in a multiplicity of new forms or species, all differing to a greater or lesser extent from the primitive type."

That is, Darwin assumed what has never been proven, namely, the efficacy of natural selection. It rests on what has been disproved—the inheritance of the slight variations or fluctuations which are supposed to result in a gradual change of species. We have then the concepts of Variation, a Struggle for Existence owing to lack of sufficient food to support all animals born into the world, Natural Selection of certain characters, the transmission of which resulted in the survival of the fittest. In brief this constitutes Darwinism.

Keith says:

"Fifty-five years have come and gone since

Chas. Darwin wrote a history of man's descent. How does his work stand the test of time?.... An enormous body of new evidence has poured in upon us. We are now able to fill in many pages which Darwin had perforce to leave blank and we have found it necessary to alter details in his narrative, but the fundamentals of Darwin's outline of man's history remain unshaken. Nay, so strong has the position become that I am convinced it can never be shaken.

"Why do I say so confidently that Darwin's position has become impregnable? It is because of what has happened since his death in 1882. Since that time we have succeeded in tracing man by means of his fossil remains and by his stone implements backward in time to the very beginning of that period of earth's history to which the name of Pleistocene is given. We thus reach a point in history which is distant from us at least 200,000 years, perhaps three times that amount. Nay, we have gone further and traced him into the older and longer period which preceded the Pleistocene age. It was in strata laid down by a stream in Java during the latter part of the Pliocene period, that Dr. Eugene Dubois found ten years after Darwin's death the fossil remains of that remarkable representation of primitive humanity to which he gave the name of Pithecanthropus, or ape-man."....

"If Darwin was right, then as we trace man backward in the scale of time he should become more bestial in form, nearer to the ape. That is what we have found. But if we regard Pithecanthropus with his small and simple yet human

brain as a fair representative of the man of the Pliocene period, then evolution must have proceeded very rapidly to bring higher races of mankind of today."

This language is that which we so constantly hear from the lips of evolutionists. When generalizing about their theory there is apparently no doubt whatever as to the fact of evolution, and it is only when we ask them to descend into details regarding the factors, and present some real proof of their position that we find out how woefully meagre the evidence is.

WHAT SCIENTISTS SAY

Before considering in detail some of the special points which Keith has made, we must examine the opinions of other eminent evolutionary authorities in regard to the present-day standing of Darwinism. Of course, natural selection and the transmission of acquired characters are the two basic concepts necessary for the successful operation of Darwin's idea, with inevitable transformation of many species. And here the evidence is so vast and so absolutely convincing and so diametrically opposed to Keith that one wonders by what process of mental juggling this eminent scientist is able to reach the conclusions which he so confidently proclaims.

Professor Wm. Bateson, the recently-deceased biologist of England and certainly one of the greatest authorities of the past century, in his presidential address to the British Association in 1915, made this momentous statement:

"Through the last 50 years this theme of natural selection of favored races has been developed and expounded in writings innumerable. Favored races certainly can replace others. The argument is sound but we are

doubtful of its value. For us that debate stands adjourned. We go to Darwin for his incomparable collection of facts. We would vain emulate his scholarship, his width, and his power of expression, but **to us he speaks no more with philosophical authority.** We read his scheme of evolution as we would those of Lucretius or Lamarck, delighting in their simplicity and their courage."

And again Bateson, speaking before the American Association, said:

"While 40 years ago the Darwinian theory was accepted without question; today scientists have come to a point where they are unable to offer any explanation for the genesis of species. **There is no evidence of any one species acquiring new factors.** But there are plenty of examples of species losing factors. Species lose things but do not add to their possessions. Variations of many kinds we daily witness, but **no origin of species.**"

Geo. Barry O'Toole in "The Case Against Evolution" page 12, writes:

"William Bateson warns those who persist in their credulity with reference to the Darwinian account of organic teleology, that they will be wise henceforth to base this faith frankly on the impregnable rock of superstition and to abstain from direct appeals to natural fact. This admission forms the conclusion of a scathing criticism of what he styles the "Fustian of Victorian Philosophy."

In his Toronto address on December 28, 1921, Bateson said:

"But that particular and essential bit of the

theory of evolution which is concerned with the original nature of species remains utterly mysterious. We no longer feel as we used to do, that the process of variation now contemporaneously occurring is the beginning of a work which needs merely the element of time for its completion; for even time cannot complete that which has not yet begun. The conclusion on which we were brought up that species are a product of the summation of variations, ignored the chief attribute of species first pointed out by John Ray, that the product of their crosses is frequently sterile in greater or less degree.

In Science, January 20, 1926, Bateson writes:

"The production of an indubitably sterile hybrid from completely fertile parents which has arisen under critical observation is the event for which we wait. Until this event is witnessed or known of, evolution is incomplete in a vital respect. From time to time such an observation is published, but none has yet survived criticism."

Bateson also writes in the same issue of Science:

"Analysis has revealed hosts of transferable characters. Their combinations suffice to supply in abundance, series of types which might pass for new species, and certainly would be so classed if they were met with in nature. Yet critically tested, we find that they are not distinct species and we have no reason to suppose any accumulation of characters of the same order would culminate in the production of distinct species. Specific difference therefore must be regarded as probably attaching to the base upon which these transferables are im-

planted, of which we know absolutely nothing at all. **Nothing that we have witnessed in the contemporary world can colorably be interpreted as providing the sort of evidence required."**

In 1922, speaking at the British meeting, he said:

"It is impossible for scientists to agree with Darwin's theory of the origin of species. No explanation whatever has been offered for the fact that **after 40 years no evidence has been discovered to verify his genesis of species."**

Professor Bateson's last writing on evolution is found in the 13th edition of the Encyclopedia Britannica in his article on Mendelism, in which he gives his considered and mature judgment in regard to the present status of evolution.

In this essay Bateson says that a great stimulus was imparted to the study of heredity and variation by the rediscovery of Mendel's paper.

"Current beliefs among naturalists were at once found to be largely incorrect. The assumed appearance of variableness is largely illusory. Of the occurrence of the genetic change which might be likely to lead to the production of new species, none has been found."

His startling conclusion is that:

"The immediate consequence has been that the development of the evolutionary theory has been tacitly suspended or postponed."

Professor W. B. Scott, Professor of Geology and Paleontology in Princeton University, in his book "The Theory of Evolution," on page 20, writes:

"Darwin's pet theory, that of natural selection, was not so fortunate....There has always

been a large body of opinion which rejected it as vague, inadequate and unsatisfactory, and there have been many attempts to submit or substitute some more convincing explanation for it."

He further says:

Personally, I have never been satisfied that Darwin's theory is the rightful one; to one who approaches the problem from the study of fossils, the doctrine of natural selection does not appear to offer an adequate explanation of the observed facts. The doctrine, in its application to concrete cases, is vague, elastic, unconvincing and seems to leave the whole process to chance. On the other hand, if Darwin's hypothesis be rejected, there is, it must be frankly admitted, no satisfactory alternative to take its place."

Dr. D. H. Scott, the eminent British botanist, addressing the 1921 meeting of the British Association, said:

"For the moment at all events, the Darwinian period is past; we can no longer enjoy the comfortable assurance which once satisfied so many of us, that the main problem has been solved—all is again in the melting pot. But now, in fact, a new generation has grown up that knows not Darwin. Is even then evolution not a scientifically ascertained fact? **No! We must hold it as an act of faith because there is no alternative.**

Geo. Barry O'Toole, in his book "The Case Against Evolution," page 10, writes of Darwin:

"His hypothesis leaves the origin of variations an unsolved mystery...Darwin erred no less with respect to the spontaneity, than with respect to

the inheritability and summation, of his "slight variations." Spencer refused to see any value whatever in Darwin's principle of natural selection, while other Neo-Lamarckians, less extreme, were content to relegate it to the status of a subordinate factor in evolution....**It is safe to say that no modern biologist attaches very much importance to natural selection.** Natural selection making the organism a product of the concurrence of blind force unguided by Divine intelligence, a mere fortuitous result, and not the realization of purpose, has furnished the agnostic with a miserable pretext for omitting God from his attempted explanation of the universe....Its scientific insolvencies have become so painfully apparent that **biologists have lost all confidence in its power to solve the problem** of organic origins."

On page 29, O'Toole writes:

"It is almost pitiful to hear the die-hards of Darwinism bolstering up a lost cause with the wretched quibble that though natural selection has been discredited as an explanation of the differentiation of species, Darwinism "in its essentials" survives intact, for if there is any feature which, beyond all else deserves to be called an essential of Darwin's system, surely it is natural selection. For Darwin it was "the most important" agency of transformation. Apart from his hypothesis of the summation through inheritance of slight variations, now completely demolished by the new science of genetics, it represented his sole contribution to the philosophy of transformism. It alone distinguishes Darwinism from Lamarckism, its pro-

totype—....**Darwinism is dead, and no grief of mourners can resuscitate the corpse.**"

Professor L. T. More, Physicist of Cincinnatti University in "The Dogma of Evolution" writes a strong section on Darwinism. On page 194 he says:

"Unfortunately for Darwin's future reputation, his life was spent on the problem of evolution which is deductive by nature....It is absurd to expect that many facts will not always be irreconcilable with any theory of evolution and, today, **every one of his arguments is contradicted by facts.**"

More says also:

"Four years after the publication of the "Origin of Species," Darwin wrote Bentham that: 'The belief in natural selection must at present be grounded entirely on general considerations. When we descend to details we **can prove that no species has changed; nor can we prove that the supposed changes are benecial, which is the ground work of the theory.**"

On page 199:

"The failure of natural selection is largely due to its foundation of false philosophy."

On page 215:

"Even from a scientific aspect, Darwin's work to establish natural selection is rapidly crumbling on its biological side."

On page 221:

"New varieties and races created by artificial selection revert to the original type as soon as they are left to their own devices....There are fewer features in common between natural and artificial selection than the Darwinian supposed."

On page 227:

"Darwin's attention was called to the fact that if only a few individuals possessed advantageous variation, the effect of chance mating would prevent its continuance since there would be little probability of these few individuals mating together, In the sixth edition, Darwin admits the justice of this criticism, and in doing so, he **absolutely abandons his own theory of natural selection.**"

On page 231:

"Even the basic principle itself, the struggle for existence as the predominating factor in organic life, is now attacked on all sides...Sexual selection is at the present time harshly criticized and even abandoned by most naturalists."

On page 237:

"Professor Bateson carefully knocks down every prop to natural selection, to the inheritance of acquired traits, and to evolution in general; then he concludes by asking us to apply the doctrine of evolution to the thoughts and actions of man because he still has faith in evolution and some day biologists may find its solution. Delage offers enough objections to evolution by natural selection to kill even the most desirable theory."

Henry Fairfield Osborn, President of the American Museum of Natural History and one of the foremost evolutionists of the day, in speaking before the British Association meeting at Oxford, said:

"We may as well face the facts, that the cause of the origin of species may never be known. Research seems to be fatal to the speculations of Lamarck and Darwin. If living today,

Darwin would be the foremost in modifying his theory. **Darwin was brave but wrong."**

Richard Swann Lull, Professor of Vertebrate Paleontology in Yale University, writing in "Organic Evolution," 1924, on page 101, says:

> "Not all authorities accept natural selection as an important factor....Many believe that natural selection has nothing to do with species forming....Still another Darwinian factor is sexual selection, the means whereby Darwin sought to explain the existence of what are known as the secondary sexual characters amongst animals....As we shall see, this is the most doubtful factor of all those advocated by Darwin and **is only held because nothing has been offered in its place."**

And to lessen the effect of his criticism, Lull, using the usual confident language, says:

> "But it must be borne in mind that however much Darwin may be assailed, the word refers only to certain of these causal factors, leaving the citadel of the evolutionary doctrine as impregnable as ever."

Dr. E. Dennert, the well-known German authority, in his convincing work "At the Deathbed of Darwinism" deals many scathing blows at this doctrine, and gives the opinions of many scientists. He presents the decidedly adverse judgment of many eminent authorities who totally rejected Darwinism, and mentions among other scientists of 25 years ago: Wigand, Hans Driesch, O. Hannan, Haacke, and Wilser, who said at the convention of Naturalists in 1897:

> "No one who has committed himself to Darwinism can longer be ranked as a naturalist."

He refers to Julius von Sachs, the most gifted and

brilliant botanist of the last century, as bitterly opposed to Darwin, also Dr. Carl Camille Schneider, Assistant at the Zoological Institute of the University of Vienna; Dr. Goatte, the Strassburg biologist; the botanists, Professor Korschinsky and Professor Haberlandt; also some of the most eminent paleontologists such as Professor Steinman, who summarizes his conclusions as follows:

1. **"The family and transition forms demanded from palaeontology by Darwinism for its family-trees, constructed not empirically but a priori, are nowhere to be found among the abundant materials which palaeontological investigations has already produced."**

2. "The results of the investigation do not correspond with the family groups drawn up according to the so-called "biogenetic principle," which principle has in fact led men of science into false paths.

3. "At best, the biogenetic principle has a limited validity, (we add that later it will undoubtedly follow Darwinism and its family trees into the lumber-room).

4. **"The results of paleontology, in so far, for instance, as they testify to the sudden disappearance of the saurians and the advent of mammals, everywhere contradict the Darwinian principle of the survival of the fittest in the struggle for existence.**

5. "The time has long passed when the Darwinian explanations were regarded with naive confidence as the alpha and omega of the doctrine of Descent.

6. "Only the principle of Descent is universally recognized; the 'how' of it, its

causes, are today entirely a matter of dispute."

Dennert gives some strong evidence from Professor Eimer, Professor of Zoology, Tuebingen, proving the untenableness of Darwin's position. Dennert says:

"Darwinism has been rejected, not on account of a lack of research, but on account of abundance of research, which proved its absolute insufficiency....It is an incontrovertible fact that the hereditary transmission of acquired characters has in no way been proved....If acquired characters are not transmitted by heredity, Darwinism is an impossibility....Experience has made it certain that Darwinism has everywhere failed."

He quotes Grottewitz on p. 119:

"There is no doubt that a number of Darwinian views which are still prevalent today, have sunk to the level of untenable myths.... The Darwinian doctrines are incapable of being strictly and irrefutably demonstrated...Darwin's theory of chance is nothing more than a myth. The origin of one species from another, the conservation of the useful forms, the existence of countless intermediary links are all assumptions, which could never be supported by concrete cases found in actual experience."

Professor Fleischman of Erlangen, the famous Zoologist, is highly praised by Professor W. B. Scott of Princeton. In his book "Die Descendenz Theorie," he writes:

"After long and careful investigation I have come to the conclusion that the doctrine of Descent has not been substantiated. I go even farther and maintain that the discussion of the

question does not belong to the field of the exact sciences of zoology and botany....Research must show that living organisms actually have overstepped the bounds dividing their species, and not merely that they conceivably may have done so....The evolution of the vertebrates from the fish is a wholly gratuitous assumption devoid of any foundation in fact."

J. Arthur Thomson, Professor of Natural History in the University of Aberdeen, writing in "Outline of Science," vol, 2, page 365, on "How Darwinism Stands Today," says:

"We are more keenly aware than in Darwin's day of our ignorance as to the origin and affiliation of the greater classes....It would be a sorry business if Darwinism stood today as it was left by Darwin....It would be a terrible contradiction in terms if an evolutionary theory did not itself evolve!....Our frankness in admitting difficulties and relative ignorance in regard to the variations and selections that lead from some dinosaurs to birds, cannot be used by any fair-minded inquirer as an argument against the idea of evolution, for how else could birds have arisen?"

On page 371, he writes:

"Since Darwin's time evidence has accumulated which shows that variations are more definite than used to be supposed."

This is rather an unfortunate admission because definiteness in variation does not lend itself to support the theory of chance evolution. Again on page 371, he says:

"One of the great changes that has come about since Darwin's day is a recognition of the

frequency of discontinuous variations by which we mean sudden novelties, which are not connected with the type of species by intermediate gradations."

Of course Darwin's theory was that of small, gradual, intermediate gradation. This "great change" mentioned by Thomson is surely and fatally opposed to Darwinism. On page 377, we read:

"We must join with Darwin in saying 'Our ignorance of the laws of variation is profound.'"

In his conclusion, page 388, he states:

"It must be said that while the main ideas remain valid, there has been development all along the line. Darwinism has evolved as every sound theory should.

"There is at present among zoologists a wide spread agreement with Sir Ray Lankester's pronouncement that one of the notable advances since Darwin's day has been getting rid of the Lamarckian theory of the transmission of individually acquired characters, or imprinted bodily modifications...The facts are not at present in favor of the Lamarckian view."

With great naivete he remarks:

"We may perhaps look for an evolution of Lamarckism as well as of Darwinism....One of the changes since Darwin's day is the recognition that variations are often very definite.... Another change from Darwinism, is the Mendelian idea of unit-characters which behave like entities in inheritance. They are handed on with a strong measure of intactness to a certain proportion of the offspring. Since Darwin's day there have been in a few cases definite proofs of natural selection at work....Darwinism

has changed and is changing, but it is not crumbling away. It is evolving progressively."

It is amusing to see how great men of intelligence persist in holding to a pet theory in spite of the most obvious and conclusive facts in opposition to it. Thomson admits that the transmission of acquired characters is disproved by scientific investigations, making impossible any Darwinian mode of evolution, and yet, in spite of this evident fact, he concludes that "Darwinism stands today more firmly than ever."

It would seem to be beyond discussion that all the concepts of Darwin have ignominiously been set aside and trampled under foot by a skeptical science. If "it has changed and is changing," why in the name of uncommon sense is it not "crumbling away?"

Dr. Caullery, writing in Science, April 21, 1916, uses these words:

"Since the time of Darwin, Natural Selection has remained purely a speculative idea."

John Burroughs, one of America's leading naturalists said, in Atlantic Monthly, August 1920:

"Darwin has been shorn of his selection theory as completely as Samson was shorn of his locks."

J. T. Cummings quoted British scientists in Nature, March 3, 1923, saying:

"I venture to say that few who have made a special and practical study of evolution, and are well acquainted with recent progress in that study, have much faith in natural selection."

Writing on paleontology in the Encyclopedia Britannica, p. 520, Osborn says:

"The net result of observation is not favorable to the essentially Darwinian view that the

adaptive arises out of the fortuitous by selection, but is rather favorable to the hypothesis of the existence of some quite unknown intrinsic law of life, which we are at present totally unable to comprehend or even perceive."

Professor Vernon Kellogg of Stanford University writing in "Darwinism—Today," p. 5, says:

"The fair truth is that the Darwinin selection theories considered with regard to their claimed capacity to be an independently mechanical explanation of descent, stand today seriously discredited in the biological world. On the other hand it is also fair to say that no replacing hypothesis or theory of species forming has been offered by the opponents of selection, which has met with any general or even considerable acceptance by naturalists."

KEITH SAYS

To return to Keith, he continues:

"Why do I say so confidently that Darwinism has become impregnable?"

Now this is precisely what we would like to know and we shall expect convincing evidence warranting the sublime faith of this ardent evolutionary advocate before we consider the case proven.

Then follows the proof: The first item seems to be certain alleged fossil remains of man which have been unearthed since Darwin's day.

Keith says:

"It is because of what has happened since his death in 1882. Since then we have succeeded in tracing man by means of his fossil remains and by his stone implements backward in time to the very beginning of that period of the

earth's history to which the name Pleistocene is given....distant from us at least 200,000 years, perhaps three times that amount. Nay, we have gone further....and have traced him into the Pliocene....Dr. Eugene Du Bois found, ten years after Darwin's death, the fossil remains of that remarkable representative of primitive humanity, a pithecanthropus or ape-man....If Darwin was right, then as we trace man backward in the scale of time he should become more bestial in form, nearer to the ape. That is what we have found."

Then he speaks of the "small and simple, yet human brain" of Pithecanthropus, and affirms that "evolution must have proceeded at an unexpectedly rapid rate to culminate today in the higher races of mankind."

Certainly this latter observation of Keith's is the wisest in the whole address. In fact, progress must have been miraculously swift and gigantic.

Keith outlines Darwin's method of proof under three heads:

1. "He gathered historical documents from the body and behaviour of man and compared them with the observations made on the body and behaviour of every animal which showed the least resemblance to man." This, of course, is the old comparative anatomy argument.

2. "He studied all that was known in his day of man's embryological history."

3. "He took into consideration the manner in which the living tissues of man react to disease, to drugs, to environment." This of course is just another form of the comparative anatomy argument.

"By a logical analysis of his facts, Darwin reconstructed and wrote a history of man."

These three lines of Darwin's investigation as men-

tioned by Keith are supplemented by what he calls "an enormous body of new evidence." As far as one can gather from the address, this new evidence consists, first, of fossil remains. In fact, Keith says that such evidence is "definite and irrefutable." These fossil remains are two, Pithecanthropus and the Piltdown man. The second line of new evidence, according to the speaker, is that from examination of blood based on the experiments of Nuttall of Cambridge University. Third, the similarity between the brains of man and anthropoid apes. Fourth, Vestigial structures in the human body.

Keith goes on to say: "We have to seek out the biological processes and controlling influences which have shaped the evolutionary history of man and ape. The evolution of new styles of man or of ape is one thing, and the evolution of new types of motor cars is another, yet for the purpose of clear thinking it will repay us to use the one example to illustrate the other. In the evolution of motor vehicles, Darwin's law of selection has prevailed....The public has selected its favorite types of cars but it has had no direct authority in designing and producing modifications and improvements."

Then he says that in order to understand the machinery underlying evolution,—"we must enter the 'factories' where the evolutionary changes are being produced, that is, we must examine the ovum as it is formed into an embryo, the embryo changing into a foetus, and the foetus into a babe." After birth he asks us to note "infancy passing to childhood, childhood into adolescence, adolescence into maturity, and maturity into old age."

He then deals with the potent and mysterious substances called hormones, which he says "were not dreamed of in Darwin's time, when also experimental

embryology was scarcely born." He pictures the body of a growing child as an immense society made up of "myriads of microscopic living units, ever increasing in numbers. One of the ways—probably the oldest and most important way—in which the activities of the communities of the body are coordinated and regulated is by the postal system discovered by Starling, wherein the missives are hormones—chemical substances in ultra-microscopic amounts, dispatched from one community to another in the circulating blood. Clearly a discovery of this ancient and intricate system opens up fresh vistas to the student of man's evolution. How Darwin would have welcomed this discovery."

In fairness to the lecturer, his closing paragraph ought to be given:

> "What is man's origin? Was Darwin right when he said that man, under the action of biological forces which can be observed and measured has been raised from a place among anthropoid apes to that which he now occupies? The answer is Yes! And in rendering this verdict I speak but as a foreman of the jury—a jury which has been empaneled from men who have devoted a lifetime to weighing the evidence. To the best of my ability, I have avoided, in laying before you the evidence on which our verdict was found, the roll of special pleader, being content to follow Darwin's own example—Let the truth speak for itself."

In the early part of his address, Keith says that in the city of Leeds "was fired the first verbal shot of that long and bitter strife which ended in the overthrow of those who defended the Biblical account of man's creation and in a victory for Darwin." The implication throughout Keith's address is that the Biblical account is absolutely wrong and this is the reason why every-

where athiests and unbelievers are snatching at this speech like a hungry dog at a bone.

These constitute all the arguments brought forward by Keith to prove his case and each of these will now be considered specifically.

COMPARATIVE ANATOMY

Does Comparative Anatomy or the resemblances existing between animals and man prove evolution of the one into the other? These similarities are obvious and admitted by all, but it is well to remember this cardinal fact that "similarity in structure is no proof of genetic or blood relationship." The fact that animals have practically the same number of bones and muscles as man, and similar organs and tissues in order to perform the same functions, is certainly no proof that man is descended from a bestial ancestry. The Creationists occupy a firm and impregnable position. God, the Creator, conceived and created the animal, providing the animal with a bodily structure similar in its form and makeup to that of man. For instance, the Creator decided that animals should breathe air—man likewise. Therefore there is no conceivable reason why both should not be given lungs. Eating similar food, they would require similar stomachs and digestive apparatus; performing the functions of standing, walking, running, they would require the same number of bones and muscles. Similarity in structure proves nothing more than a common basic plan of architecture.

This plan is seen everywhere today. When man builds a shack on the desert, a bungalow, a two-storied house, or a large apartment, the same basic plan is adopted. Is there any reason why the Divine Architect should not do the same thing in His creative work? God does but one kind of work, the best possible, and if he gave animals less or more structures than man, the

finished product would not be absolutely perfect, which would be impossible for an Omniscient Creator. This is all that Comparative Anatomy proves.

Osborn confesses the weakness of this argument in the Encyclopedia Britannica, Vol. 20, p. 580:

> "From comparative anatomy alone, it is possible to arrange a series of living forms which, although structurally a convincing array, because placed in a graduating series, may be, nevertheless, in an order inverse to that of the actual historical succession."

Professor D'Arcy Thompson in his book "On Growth and Form," writing on this argument from homologies or resemblances, says:

> "But this great generalization is apt, in my opinion, to carry us too far. It will be safe and sure, and helpful, and illuminating, when we apply it to such complex entities—resultants of the combination and permutation of many variable characters, as a horse, a lion, or an eagle; but (to my mind) it has a very different look and a far less firm foundation, when we attempt to extend it to minute organisms whose specific characters are few and simple, when regarded from the point of view of physical and mathematical description and analysis, and whose form is referable, or (to say the least of it) is very largely referable to the direct and immediate action of a particular physical force.
>
> "Certain resemblances are the result of similar forces playing on similar material; differences happen when dissimilar forces impinge on different material. The zoologist must begin with mathematics."

Professor Otto, writing of Professor Kremer's book,

"The Natural History of Plants," disposes of the first argument in favor of the theory of Descent, the homology of individual organisms, by explaining that:

> "Homology is due to the similarity of function in the different organisms....Homology of organisms is no proof of their hereditary affiliation."

Professor St. Geo. Mivart says in his book, "Lessons in Nature:"

> "Experience more and more convinces me that the number of similarities which have arisen independently is prodigious, as well as that very great caution is needed in endeavoring to discriminate between likenesses etc....."

Professor O'Toole effectively demolishes the argument from homology in "The Case Against Evolution." He says:

> "To suppose that inheritance alone can account for structural resemblances is unwarranted assumption....The mechanists have succeeded in extracting from the facts, not what the facts themselves proclaim, but what preexisted in their own highly-cultured imaginations, so well stocked with cogs, cranks, ball-bearings, and other aesthetic imagery, emanating from polytechnic schools and factories...In these universal properties of living matter, therefore, we have a common basis for general structural and organizational laws, quite adequate to account for both the homologies and analyses of living matter."

On page 63, he writes:

> "But, when it be upon, or beneath the surface, similitude of any kind suffices to establish our contention that inheritance is not the only

similifying influence present in organisms, and that **resemblance is perfectly compatible with independence of ancestry.**

He sums up his argument by saying:

> "The evolutionary argument from homology is defective in three important respects:
>
> (1) In its lack of experimental confirmation; (2) In its incomplete enumeration of the disjunctive possibilities; (3) In its inability to construct a scheme of transmutation that synthesizes inheritance and variation in a logically coherent and factually substantiated formula."

We shall now notice Darwin's argument from embryology. The evolutionist seeks to explain from the study of the human embryo that he discovers in the early stages of development many animal parts which are subsequently changed or discarded as the human characters become dominant. Also the "recapitulation theory" is used to prove that in our individual development before birth we recapitulate or repeat the history of the race. It is alleged that the human body passes through various changes of species similar to those characterizing the history of the race during past milleniums. What standing among scientists has this theory?

Professor W. B. Scott of Princeton says in "Readings in Evolution" p. 173:

> "Thirty years ago the recapitulation theory was well nigh universally accepted....Haeckel called this theory the "fundamental biogenetic law," and upon it he established his whole "History of Creation." Nowadays, this "fundamental law" is very seriously questioned and by some high authorities is altogether denied."

Professor Thos. H. Morgan of Columbia University, writing in "Evolution and Adaptation," p. 83, states:

> "It seems to me that the idea that ancestral stages have been pushed back into the embryo, and that the embryo recapitulates in part these ancestral adult stages, is in principle false."

The Scientific American, Feb. 1921, p. 121, quoting Professor A. Weber of the University of Geneva, says:

> "The critical comments of such embryologists as O. Hertwig, Keibel, Vialleton, indeed, have practically torn to shreds the aforesaid fundamental biogenetic law. Its almost unanimous abandonment has left considerably at a loss those investigators who sought in the structure of organisms the key to their remote origin or to their relationshps."

P. C. Mitchell in his article "Evolution" in the Encyclopedia Britannica says:

> "The most striking general change has been against seeing in the fact of ontogeny (embryonic development) any direct evidence as to philogeny (ancestral history)."

Geo. McCready Price in "The Phantom of Organic Evolution," quotes Percy Davidson as follows:

> "From these authoritative statements it appears that the facts of embryonic resemblances fail to support recapitulation in all three of its main implications."

Price also quotes Geoffrey Smith, who writes in "Primitive Animals:"

> "When we attempt to go behind philogeny and discover their origin and interrelationships, we leave the firm ground altogether and wander

in a slippery and nebulous region of speculation....It is true that certain hypotheses of a plausible character have been suggested which have satisfied uncritical minds, and which we often hear advanced as a part of ascertained science and accepted in an otiose spirit....But what is there of reality in these speculations? They rest not on any objective evidence but on the tendency of the mind to pass from the apparently simple to the manifestly complex, and to regard the former as primitive and ancestral, and the latter as secondary and derivative."

Professor Karl Vogt, Geneva writes:

"This law which I long held as well founded, is absolutely and radically false."

Professor Adam Sedgwick, the very eminent English Embryologist, in his book "Darwinism and Modern Science," p. 174, says:

"But as Huxley has shown and as the whole course of paleontological investigation has demonstrated, no such statement can be made (that this law of recapitulation is true.) The extinct forms of life are very similar to those now existing, and there is nothing especially embryonic about them. So that the facts as we know them, lend no support to the theory (of recapitulation)."

And, on page 176, he writes:

"After fifty years of research and close examination of the facts of embryology, the recapitulation theory is still without satisfactory proof."

Kellogg, in "Darwinism To-Day," pp. 18, 21, says:

"The proof that man is descended from a

his individual development, is not of the sort to fish because he had gill-slits at one period in rely on too confidently. The recapitulation theory of Fritz Muller and Haeckel is chiefly conspicuous now as a skeleton on which to hang innumerable exceptions."

"The recapitulation theory is mostly wrong and what is right in it is mostly so covered up by the wrong part that few biologists longer have any confidence in discovering the right." Wasmann, in "Modern Biology" says:

"Do the facts warrant the assertion that the individual development of every creature is invariable and the recapitulation of the history of the race? No, they do not, for the exceptions to this rule are far more numerous than the instances of it.' (p. 449)

And even Keith himself in "The Human Body," p. 95, has to admit:

"Now that the appearances of the embryo at all stages are known, the general feeling is one of disappointment; the human embryo at no stage is anthropoid in its appearance."

Are we not justified, in the light of these authoritive judgments, in saying that the study of the embryo gives no support whatever to the evolutionary hypothesis?

BLOOD TEST

Another argument of Keith's as outlined above is from the examination of blood. Professor Nuttall conducted 16,000 experiments, so it is stated, in 1904; this evidence is 24 years of age and rather antiquated to be brought forward as recent evidence.

Keith says:

"He found the blood of man and that of the

great anthropoid apes gave almost the same reaction. Bacteriologists find that the living anthropoid body possesses almost the same susceptiveness to infections and manifest the same reactions as does the body of man."

Certainly to anyone who knows the results of these tests it would appear very difficult to derive much evolutionary comfort from them. Some of the results are not only exceedingly peculiar but manifestly absurd. As a matter of fact, in the experiments, the blood is allowed to clot, a process which removes not only the life principle but also all the solid elements. All that is left is the watery serum which forms the basis of the blood, and might, without giving any support to evolution, be similar in both man and animals.

In the list of results that are given, table "A" indicates that old world monkeys are eight points removed from man, while new world monkeys are 22 points distant. But table "B" shows O.W.M. 35 points away from man and anthropoids, a discrepancy of 27 degrees between the two tables.

But table "C" proves O.W.M., man, and anthropoids to be practically identical, while table "D," to add to our confusion, gives 13 points between O.W.M. and man and 27 points between man and anthropoids. But table "E," to make matters worse, suggests that man is a real ape! Also, he seems to be a monkey—O.W.M. species. We would like to know really what man is anyway? Table "C" reveals the fact the O.W.M. and N.W.M. are 42 points apart, but in table "D" an impassable gulf of 64 points yawns between.

Table "A" does not permit the marmoset and O.W.M. to come closer together than 42 points, but table "D" increases the distance to 64.

In table "D," anti-sheep serum was used on horses and other animals. According to one test, horses and

sheep are 84 degrees removed. In this same table where wild pig serum was used against horses and sheep, the two latter animals are close brothers, separated by only three points.

In table "E," pig and horse seem to be about the same kind of animal, 20 and 16 respectively, but in the next method, a tremendous chasm of 74 points separates them. In the one, sheep and dog are 93 points apart, while in the other they are identical.

Nuttall also gives the results of quantitative tests in which he measured the amount of precipitin as deposit produced by the various bloods tested. Some of the results are so exceedingly peculiar that it is difficult to see how any conclusions of value can be drawn.

In the first test, jackall, otter, ox, sheep, and Tibetan bear show a definite relation to man. In the second and third tests, one species of baboon is as closely related to man, and a short-tailed O.W.M. more closely related than the ape.

In another test, in which the actual proportion of deposit is given very exactly in decimals, horse, sheep, and baboon are grouped together with .004; and the whalebone whale, one species of baboon, the tiger, the African anthropoid and man, are the same, .003.

In the second test, man, the civet cat, the tenrec, a little mammal of Madagascar, are all on the same level, .001. Certainly, while not noble, our forbears are numerous! Even Professor W. B. Scott, friendly as he is to the evidence of evolution, has to admit: "It could hardly be maintained that an ostrich and a parrot are more nearly alike than a wolf and a hyena, and yet that would be the inference from blood tests."

In his Berlin "Discussion of Evolution," Eric Wasmann most emphatically refutes a number of these confident claims for blood and he writes of these same 16,000 experiments of Nuttall:

"We are not justified in regarding a chemical and physiological resemblance as constituting a blood relationship in the sense of having a common origin. Let us assume that there is a blood resemblance between the blood of apes and that of man. This would prove that the same kind of likeness existed in the blood of man and apes, as in their skeletons and other organs, but similarity does not imply blood relation, such as exists between cousins and kinsfolk....And the blood reaction points to a close relation between creatures that are morphologically far apart. It would seem that we cannot make much of evidence derived from similarity of blood if comparative morphology arrives at different results. More recent investigators, Uhlenhuth, and Friedenthal, attempt to throw a doubt on the alleged actual existence of similarity between human blood and that of higher apes, and this circumstance renders untenable all the conclusions based on the similarity, viz., that man is closely related to the higher apes, or is even an ape himself."

Even Professor Nuttall seems to realize the difficulties inherent in his experiments because he writes:

"In viw of the crudity of our methods, it is not surprising that certain discrepancies may be encountered in the course of investigations conducted bv biological methods."

In his book he devotes 15 pages to "Sources of Error," showing how great is the risk of mistakes, which must invalidate every conclusion. Certainly this blood argument is one of the weakest brought forward by the believer in evolution.

VESTIGIAL ORGANS

Next we consider the argument from vestigial organs.

Keith says:

> "We find the same vestigial structures—the same "evolutionary postmarks—in the body of man and anthropoid."

Vestigial remains are tissues or organs found in the human body for which there is no known use and which are alleged to be remnants or vestiges of a pre-human existence. Since mankind has attained the present high point of development, these vestiges have shrunken and atrophied and are now useless incumbrances according to this view. The claim is one of the most grotesque in all the realm of evolutionary imaginings.

Dr. P. C. Mitchell in Encyclopedia Britannica, vol. 20, p. 33, writes:

> "It is almost impossible to prove that any structure, however rudimentary, is useless, and if it is in the slightest degree useful, there is no reason why, on the hypothesis of direct creation, it should not have been created."

Even Keith himself, writing in "Nature" a few months ago, eliminated the appendix from the list of vestigial organs and made this significant remark:

> "As our knowledge increases the vestigial organs decrease."

MISSING LINKS

Keith attaches great importance to two specimens of alleged 'missing links,' as providing irrefutabe evidence for evolution. One cannot help but admire Keith's

courage in bringing forward these two grotesque and long-since-exploded bits of evidence.

Of the first, Pithecanthropus Erectus or the Java apeman, R. R. Marrett writes in "Anthropology:"

> "By itself stands the so-called Pithecanthropus (ape-man) of Java, a regular missing link....It must remain, however, highly doubtful whether this is a proto human being or merely an ape of a type related to the gibbon. This, if an ape, has an enormous brain; if a man, he must have verged on what we would consider idiocy.... (p. 76)

Prof. E. Metchnikoff, late Head of the Pasteur Institute, at Paris, says, in "Nature of Man," p. 49:

> "The facts about this creature are meagre and have been interpreted differently."

Prof. E. D. Cope, in "Primary Factors of Organic Evolution," is doubtful....as to all the bones belonging to one and the same skeleton, when he says:

> "The tooth was found close to the skull and belongs **probably** to the same individual as the latter, while the reference to the femur is more uncertain as it was found some fifty feet distant. (p. 169).

Prof. Wm. Hertwig, in his book, "Zoology," declares:

> "The opinion that is most probably correct is that the fragments belonged to an anthropomorphic ape of extraordinary rize, and an enormous cranial capacity with a relatively large brain."

E. Wasmann, in "Modern Biology and the Theory of Evolution," gives his opinion as follows:

> "It is nothing short of an outrage upon truth,

to represent scanty remains, the origin of which is so uncertain as that of the pithecanthropus, as absolute proof of the descent of man from beasts, in order thus to deceive the general public."

Adverse criticisms similar to the above, abound in the literature, but the opinion which probably carries the most weight, is that of Prof. Rudolph Virchow, for thirty years, President of the Berlin Anthropological Society, and surely one of the world's greatest authorities, not second to Sir Arthur Keith, in any respect.

Wasmann, in "Modern Biology," p. 465, writes that

"Virchow uttered a very courteous but crushing criticism upon the speaker's remarks, and showed it was by no means certain that the remains had all formed part of the same individual and that it was still less possible to decide whether that individual was a man or an ape."

In December of the same year, Virchow, having further examined the skull, said that he had come to the clear conclusion that the skull had not belonged to a man, but that it showed greatest similarity to the skull of a hylobates (gibbon). According to all the rules of classification, he considered the being an animal, and indeed an ape. He had compared the original drawing made by Dr. Dubois, with the skull of a hylobates, and there was as great similarity as one could expect between two individuals of the same species. As to the teeth, they appeared much more ape-like than human, In regard to the thigh bone, he said, that in spite of its similarity to that of man, there was so much agreement with that of a gibbon, that he saw no difficulty in its having belonged to a large-size hylobates (gibbon).

Dr. J. H. F. Kohlbrugge, in "Die Morphologie Abstamung des Menchen," says:

> "....This opinion compared with others that have been cited, shows that we have not here to deal merely with comparisons with one, two, or three unknown forms, but that the number of the great unknown grows so large that our actual knowledge becomes a small point upon which a hypothetical pyramid is built with its basis in the air. The great antiquity ascribed to Pithecanthropus appears to be altogether doubtful. Nothing compels us to conclude that the thigh bone and the skull belong to one another."

What is the reputation of the second fossil proof (?) which Keith mentions? Is he justified in saying that the Piltdown Man, otherwise known as Eoanthropus Dawsoni, constitutes a real link in man's descent from animals?"

When this specimen was first found, Prof. Keith, curator of the Museum of the Royal College of Surgeons, London, Eng., did not think very highly of it, and demonstrated that the brain capacity of the Piltdown skull, was not 1070 c.c., the very convenient evidential size given it by its finders, in their effort to see an intermediary form between man and ape, but nearer 1500 c.c. This was a staggering blow at the time, but since then new "reconstructions" have been made with the result that the present capacity of the Piltdown cranium, according to its friends, is approximately 1300 c.c.. But even this figure is much too large to serve the purpose of the transformists.

To add to our confusion, Professors Gregory and Miller pointed out that the tooth described and used as the right lower canine, was no lower tooth of any kind at all, and not even a right tooth, but a left upper!

Prof. Ales Hrdlicka, leading American anthropologist, wrote in the Smithsonian Report for 1913, pp 491-552:

> "A most important development in the study of the Piltdown remains is the recent well-documented objection by Prof. Garrett S. Miller of the U. S. National Museum, to the classing together of the lower jaw, and the canine tooth with the cranium. According to Miller, who had ample anthropoid, as well as human material for comparison, the jaw and tooth belonged to a chimpanzee."

A. W. McCann, says of this:

> "This is a heart-breaking admission; and even more heart-breaking is the admission made by Hrdlicka himself when he urges that none of the conclusions regarding Piltdown man should be accepted, and that all hypotheses relating to it must be regarded as more or less premature."

Keith himself, in "The Antiquity of Man," p. 75, writes:

> "The comparison of the fragments of the skull with corresponding parts of modern skulls, convinces students of anatomy that in general brain capacity, the head of the Piltdown race was remarkably similar to modern races."

And again on page 429, he affirms:

> 'Piltdown man saw, heard, thought, and dreamed much as we do."

It looks as if the scientists really did not know much at all about it! The reason for the uncertainty seems to be that the outlines of the Piltdown jaw are identical with those of a chimpanzee jaw. The molar teeth are identical with the ape form. The cranial fragments

on the other hand, in practically all their details, are essentially human.

Prof. George Grant Mac Curdy of the Anthropological Department of Yale University, writing in "Science," Feb. 18, 1916, says:

> "Regarding the Piltdown specimens, we have at last reached a position that is tenable. The cranium is human as was recognized by all in the beginning. On the other hand, the mandible and the canine tooth belong to a chimpanzee."

Let Keith give the final judgment on this freak. He says in "The Antiquity of Man," p. 496:

> "We can say with certainty that the forehead of Eoanthropus was well formed. It was high, prominent, and, in width, equal to that of a modern skull."

And, on page 428, he gives the conclusion which would seem to invalidate all the claims made for "Eoanthropus."

> "We have in the Piltdown specimens, a certain assurance that one race of mankind had, so far as the mass of brain is concerned, a modern human standard, at the beginning of the Pleistocene period."

Then, if the Piltdown skull contained a brain of from 1300 c.c. to 1500 c.c. capacity, if the owner of this brain saw, felt, heard and dreamed much as we still do; was possessed of a high, prominent, well-formed forehead, surely we may ask where are the ape-like characteristics which are certainly and badly needed if it is to offer any support to the theory of evolution.

Keith does not refer to the others in the well-known series of alleged 'links' so it may be presumed that he does not have very much confidence himself in them.

HORMONES

The question of hormones as a possible cause of evolution, may be dismissed in a few words. The organs and tissues which produce these remarkable, mysterious, and little understood substances, used to be called "vestigial" and useless by the followers of Darwin. Now they are known to be indispensable to life. This is another instance of a discarded hypothesis, a great number of which strew the pathway of science.

Certainly we are safe in saying that there is nothing known about them which would lead us to believe that they can so change life-forms that new species would eventually be produced.

The hope is obviously inspired by the sincere desire to discover some means by which evolution could be made to work. Hitherto, the 'factors' of evolution have eluded the most intense search. To one whose "brains are not scrambled" it would appear that the "fact" of evolution is just as strong, but no stronger than the "factors" of it.

CHANGE OF SPECIES

There is one statement which cannot be contradicted in this discussion and that is that evolution depends on numerous changes of species. Almost unlimited variation is admitted, but unless the types of life are definitely changed, transformism is absolutely impossible.

TRANSMISSION OF ACQUIRED CHARACTER

Also it is true, that these necessary changes of species cannot be brought about unless acquired characters are transmitted from one generation to another.

What is the consensus of scientific opinion on these two vital points? J. Arthur Thomson, the Aberdeen

professor of Natural History, has already been quoted in regard to the Lamarckian theory of the transmission of acquired characteristics. He says that the idea is largely discarded for lack of evidence.

Professor Vernon Kellogg writes in 'Darwinism Today,' p. 4, as follows:

> "Mutations seem to be too few and far between; for orthogenesis we can discover no satisfactory mechanism; and the same is true for the Lamarckian theories of modification by the cumulation, through inheritance, of acquired or ontogenic characters. "Kurz und gut," we are immensely unsettled."

And, on page 18 of the same book, he says:

> "Speaking by and large, we only tell the general truth when we declare that no indubitable cases of species forming, that is, of descent, have been observed; and that no recognized case of natural selection really selecting has been observed."

Here are two momentous and fatal confessions, which ought, if true, forever to demolish faith in this imaginary concept.

Listen to Dr. David Starr Jordan of Stanford University, in "Science," October 20, 1922, p. 448:

> "None of the created 'new species' of plant or animal I know of would last five years in the open; nor is there the slightest evidence that any 'new species' of field or forest or ocean, ever originated from mutation, discontinuous variation or hybridization."

George Barry O'Toole writes on page 28, "The Case Against Evolution,":

> "Anyone thoroughly acquainted with the re-

sults of genetical analysis and research, will find it impossible to escape the conviction that there is no such thing as experimental evidence for evolution. In spite of the enormous advances made in the fields of genetics and cytology, the problem of the origin of species is, scientifically speaking, as mysterious as ever. No variation of which we have experience is interpretable as the transmutation of a specific type."

More, in "The Dogma of Evolution," p. 121, says:

"With all our contriving, we have never been able to produce a new species, and reversion to the common type occurs when indiscriminate breeding takes place."

Sir J. W. Dawson, in "The Origin of the World," p. 227, writes:

"No case is certainly known in human experience where any species of animal or plant has been so changed as to assume all the characters of a new species."

MUTATIONS

Mutation, or the occurrence of sudden large changes in a single generation, has been claimed to be the cause of new and distinct species and as the method by which perhaps evolution has occurred.

On this phase, we shall hear what Kellogg has to say in "Darminism To-Day, p. 19:

"We can only tell the general truth when we declare that no indubitable cases of species forming or transforming, that is, of descent, have been observed. I hasten to repeat the names of the Ancon sheep, the Paraguay cattle, the Porto Santo rabbit, the Artemis of Schmankewitch,

and the De Vriesian Evening Primrose, to show that I know my list of classic possible exceptions to this denial of observed species-forming, and to refer to Weldon's broad-and-narrow-fronted crabs as a case of what may be an observation of selection at work. But such a list, if it could be extended to a score, or to a hundred, of cases, is **ludicrous** as objective proof of that descent and selection under whose domination, the forming of millions of species is **supposed** to have occurred."

Are these unequivocal statements anything less than a deathblow to evolution, delivered by one of its own advocates? Since this interesting phenomenon is so frequently used as evidence for the theory, one or two crushing deliverances are in order.

Prof. August Weismann, writes in "Darwin and Modern Science," pp. 23-24:

"Even if saltatory (sudden, large) variations do occur, we cannot assume that these have ever led to forms which are capable of survival under the conditions of wild life. Experience has shown that in plants which have suddenly varied, the power of persistence is diminished.

"It now appears that the far reaching conclusions drawn by De Vries from his observations on the Evening Primrose, rest upon a very insecure foundation. The plant from which De Vries saw 'numerous species'--his 'mutations' arise, was not, as he assumed, a wild species that had been introduced to Europe from America, but was probably a hybrid form which was first discovered in the Jardin des Plants in Paris, and which does not appear to exist anywhere in America as a wild species.

"This gives a severe shock to the 'Mutation

Theory,' for the other actually wild species with which De Vries experimented showed no 'mutations' but yielded negative results."

If this is not sufficient to send this 'factor' to oblivion forever, hear what Dr. Alfred Russell Wallace said in an article, "The Present Status of Darwinism," in the Contemporary Review, August, 1908:

> "There is no proof whatever that in a state of nature such mutations are produced, except perhaps, very rarely; while the assumption that they have been and are produced so frequently as to constitute the mode by which ALL existing species have come into existence is a most illogical conclusion to draw from the phenomens presented by one species of plant of totally unknown parentage.
>
> "These positive assertions as to what has occurred throughout the whole realm of organic nature in the whole course of its development, rest wholly on experiments with one plant, although these experiments are rendered comparatively valueless owing it its not being itself a wild species, but probably a hybrid. Was there ever such a mountain of theory reared upon such an almost infinitesimal basis of fact?"

This is strong language from a great man. Will the evolutionists listen to him and the others?

MENDELISM

Mendelism too, offers no hope to the ardent believer in a brute ancestry. Prof. W. B. Scott writes on this in "The Theory of Evolution," p. 163:

> "Interesting and profoundly important as are the results of the Mendelian investigation....they have rendered but little assistance in making the

evolutionary processes more intelligible, and instead of removing difficulties, they have rather increased them."

As if there were not enough difficulties before!

GEOLOGY

In order to complete this study of the present status of the entire evolutionary scheme, a few authoritative expressions of opinion concerning the geological evidence may be given, although Keith makes no mention of this phase. Many people believe that the evidence from the rocks is irrefutably in favor of evolution. Let us see.

Prof. A. C. Seward, Cambridge, in "Nature," April 26, 1924, writes:

> "A student who takes an impartial retrospect, soon discovers that the fossil record raises more problems than it solves."

Herbert Spencer, in "Illustrations of Universal Progress," p. 376, said:

> "The facts of palaeontology can never suffice either to prove or disprove the developmental hypothesis."

Dr. H. A. Nicholson, in "A Manual of Geology," p. 94, affirms:

> "The geological record of the earth begins, indeed, with well developed representatives, of all the chief groups of the animal kingdom with the exception of the back-boned animals."

Prof. L. T. More, in "The Dogma of Evolution," says, p. 160:

"The more one studies palaeontology, the more

certain one becomes that evolution is based on faith alone."

In order to tell us how long and when the various forms of life existed on earth, geology gives definite names and time values to the different layers of strata. More's conclusion on this is found on page 151:

> "We can be certain that geology cannot, and never will be able to, translate the thickness of any stratum into an equivalent length of time, and that it cannot and never will be able to, establish real contemporaneousness of time in different parts of the world.

If this statement be true, then geology fails to support evolution.

O'Toole sums up a powerful argument against the evolutionary interpretation of geology in "The Case Against Evolution," p. 126:

> "Yet, what could be more enigmatic than the rock record as it stands?...The palaeontological argument is simply a theoretical construction which presupposes evolution instead of proving it. Its classic pedigrees of the horse, the camel, and the elephant, are only credible when we have assumed the 'fact' of evolution, and even then, solely upon condition that they claim to approximate, rather than assign, the actual ancestry of the animals in question."

> "In palaeontology, as in the field of zoology, evolution is not a conclusion but an interpretation. In palaeontology, otherwise than in the field of genetics, evolution is not amenable to the check of experimental tests, because here it deals not with that which is, but that which was....These obscure and fragmentary vestiges

of a vanished past, by reason of their very incompleteness, render themselves quite readily to all sorts of theories and all kinds of speculation."

WAR AMONG THE EVOLUTIONISTS

Accepting the conclusions of Darwin, who affirmed in "The Descent of Man," chapter six, p. 221, that man has come from the Old World Monkey, Keith is bound to believe in an ape ancestry for mankind.

A battle royal is on between the evolutionists themselves at the present time, and those sensible folks who repudiate the absurd claims of their opponents, are pleased to observe this violent internal warfare.

Maynard Shipley, in a recent article which he calls "Demonking Evolution-Osborn's Flirtation With the Shade of Bryan," gives us some interesting inside information.

> "The Fundamentalists have just gained new support for their crusade against the ape-man theory, and from no less an anti-Fundamentalist than "the Nestor of American palaeontologists," Dr. Henry Fairfield Osborn, Director of the American Museum of Natural History. Dr. Osborn....now concedes in effect, that, "so far as the descent of man from an ape ancestor is concerned, the learned Rev. John Roach Straton, and the still more erudite and now lamented William Jennings Byran, uttered but the truth in declaring that there are no fossil exhibits in the great museum of New York which demonstrate man's descent from some ancient anthropoid ancestor.... Dr. Osborn now regards "the **ape-man theory as totally false and misleading.**"

Osborn, revoking his formed confident fiats, now

declares that we are not descended from an ape-like ancestor of Miocene Time, but from a distant stock (of the Oligocene period), which is assumed to have existed at that time. But, unfortunately, there are absolutely no fossil records of these very imaginary creatures. We are in a serious dilemma! Shall we believe Darwin and Keith, or shall we give our support to the more modern school headed by the "Nestor of American palaeontology?"

Shipley, manifesting a very seriously disturbed disposition, goes on to tell us that Osborn's opinion is that

> "Man sprang from a stock neither human nor ape-like but possessing certain common attributes which have been transmitted over this very long period of time (given as 16,000,000 years) to variously branching races of human beings who never passed through the simian stage on the one hand, and to variously branching races of anthropoid apes on the other."

We shall allow these authorities (?) to fight this out among themselves, with the probability that when the smoke of conflict has cleared away, nothing of either will be left to tell the tale. The truth is that all of them are wandering in an impenetrable fog of uncertainty, ignorance and credulity. No sooner is one theory opposed to creation, propounded, than it is demolished by someone of equal authority (?), with the result that every new concept is more grotesque than those which preceded!

THE BIBLE TRUE

The believer in the Biblical account of Creation occupies an impregnable and happy position. The Bible is scornfully indifferent to hatred, ridicule and bitter assault. Its age-long statements are never com-

pelled to change because they are Infallible Truth. Every discovery in every realm of scientific investigation, substantiates, down to the minutest detail, the Scriptural Record.

The most potent and effective weapon which is being used by Satan in his present furious attack on the Bible, is evolution. He seems to have reserved this implement of war, for the closing days of this dispensation, soon to usher in the Millenial age when Satan will be overthrown and Truth will be triumphant, under the leadership of the coming King.

In this third decade of the twentieth century, no one need make any apology for accepting the Bible at its face value, and rejecting evolution with all other man-made explanations of the universe, based on false, God-eliminating ideas. The doctrine of evolution is utterly opposed to common-sense, science and Scripture, and has nothing to account for its existence except the purpose of some of its leading exponents to use it to prove the Word of God false and of human origin.

But, a Book written with such sustained dignity and meticulous precision, abounding in lightning-like phrases, arrows shot from the quiver of Infallible Wisdom, exhibiting the supernatural prescience of prophecy, contemptuously indifferent to the flippant insolence of a decadent skepticism, miraculously anticipating by thirty centuries the most stupendous discoveries of modern times, is not a patchwork of grotesque stupidity, incorporating a thousand mangled delusions, a monstrous travesty of Truth.

Such a Book is and must be the sublime embodiment of Omniscience, the supreme Gift to man from the Ruler and Creator of the Universe.

This remarkable Record is supreme in its history, its science, its ethics, and its spiritual concepts, every

page revealing the imprint of the finger of God, and the divine illumination of Deity.

Therefore when Darwin or Keith tells us that evolution is true, and the Bible false, we reply, "No," and reiterate our unshakeable faith in the sublime statement of God Himself,—"In the beginning, God created."